Message

From: Harrington, Jim (DEC) [jim.harrington@dec.ny.gov]

Sent: 11/16/2016 6:44:56 PM

To: Garbarini, Doug [Garbarini.Doug@epa.gov]; Mannino, Pietro [Mannino.Pietro@epa.gov]

Subject: FW: Radium Well Sampling

FYI - this is the email I mentioned. I'll forward the incoming

James B Harrington, PE
Director, Remedial Bureau A
Division of Environmental Remediation
518 -402-9624

Please note my new email address Jim.Harrington@dec.ny.gov

From: Schick, Robert (DEC)

Sent: Tuesday, November 15, 2016 11:44 AM

To: Personal Privacy/ Ex 6 (email address)

Cc: Fly, Lora B CIV NAVFAC MIDLANT, IPTNORTH <lora.fly@navy.mil>; Harrington, Jim (DEC)

<jim.harrington@dec.ny.gov>
Subject: Radium Well Sampling

Ms. D'Archangel o- DEC has reviewed the information provided in your October 31, 2016 email to Jim Harrington and I offer the following:

The Van De Graff generator that you mentioned created high voltage static electricity that was used in various research applications. While it was undoubtedly hazardous to be around during operation, it was not radioactive, and the static electricity dissipated when the machine was shut down.

Northrop Grumman did receive a patent for the Pebble Bed Reactor in 1993 for a reactor powered turbine engine (http://patents.justia.com/patent/5255509). However a research paper published later that year (https://ntrs.nasa.gov/search_jsp?R=19930017779) indicated that a test facility was being designed and would be located at the Nevada Test Site or the Idaho National Engineering Laboratory. We are not aware that a facility was ever built and don't believe that a reactor powered turbine engine has ever been commercialized. Even if it had been, Grumman never manufactured turbine engines at Bethpage.

Plant 5 was constructed in 1944 and included small machine shops, model shops, a structural test hanger and laboratories. Historic uses included a chrome plating facility, photo lab, cold flow testing, sonar testing, painting and paint stripping, aircraft fueling (by tank trucks) and degreasing. In addition, a heat treat and age hardening facility, alodine line, paint tunnel and sandblast booth were also utilized at the Plant 5. During the 1960s, the Plant was repurposed as an integrated test and final assembly area for the LEM lunar module. This is perhaps why it was referred to as nuclear space area. Based on information provided by Grumman there is no indication that they used any radioactive materials and there was no manufacturing involving such material.

Plant 14 was originally constructed in 1960-61 as a one story building and is now a three-story building with a partial basement, The original one story structure included a hydraulic fluid pump room (used for controlling a flight simulator), anechoic chamber (sound proof area), antenna and radar

development lab, low frequency radar lab, integrated logistics system lab, shipping and receiving area, avionics lab, office areas and conference rooms, prototype lab, thermodynamics lab, mechanical shop area, mechanical test room, and metal fabrication room. The other main area of Plant 14 known as the Prom area, was an addition built in 1981. The Prom area is comprised solely of office spaces. There is no information that Grumman used any radioactive materials and there was no manufacturing. We did not find any information relative to the Pebble Bed Reactor (discussed above) but there may have been engineers in the office part of the building working on it.

In summary, we have found no information that radioactive materials (other than the sealed sources used in the Materials Laboratory and the instruments installed into aircraft) were in use at the Grumman or Navy facilities.

Should you have any further questions regarding this matter, please do not hesitate to contact me.

Robert W. Schick, P.E.

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